

Public Health Preparedness and Situational Awareness Report: #2019:50

Reporting for the week ending 12/14/19 (MMWR Week #50)

December 20th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

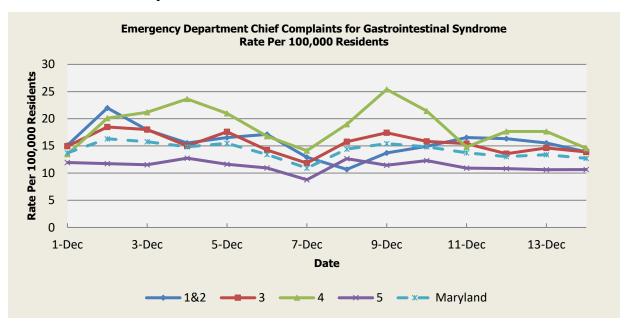
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

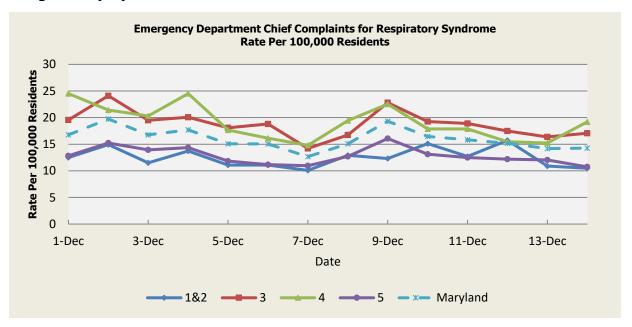


There were three (3) Gastrointestinal Syndrome outbreaks reported this week, two (2) outbreaks of Gastroenteritis in Assisted Living Facilities (Region 3), one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 4).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	13.33	15.08	15.96	10.27	13.16	
Median Rate*	13.31	14.87	15.46	10.17	13.03	

^{*} Per 100,000 Residents

Respiratory Syndrome

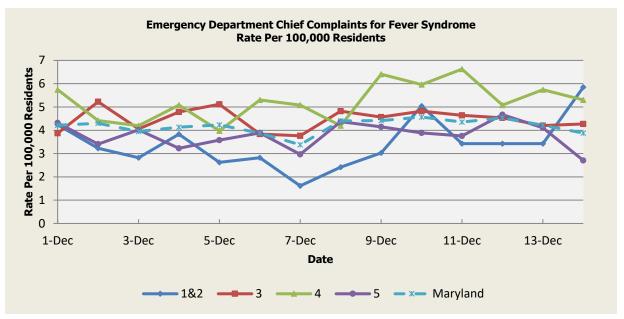


There were three (3) Respiratory Syndrome outbreak reported this week, one (1) outbreak of INFLUENZA associated with a School (Region 4), one (1) outbreak of Influenza/Pneumonia associated with a Day Program (Region 5), one (1) outbreak of ILI associated with a Daycare (Region 5).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	12.63	14.75	15.08	9.97	12.76	
Median Rate*	12.10	14.21	14.35	9.65	12.30	

^{*} Per 100,000 Residents

Fever Syndrome

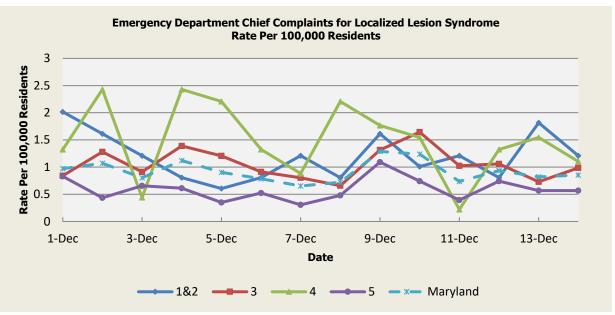


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.08	3.90	4.13	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

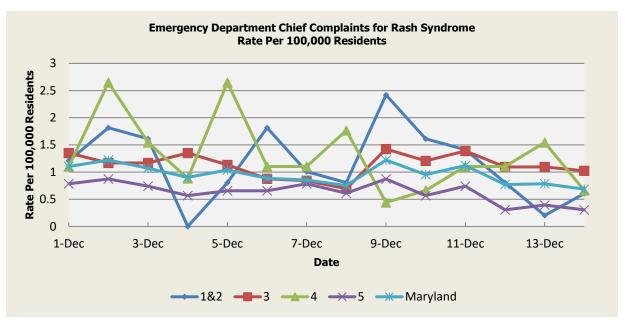


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.17	1.78	2.04	0.91	1.41	
Median Rate*	1.01	1.72	1.99	0.87	1.36	

^{*} Per 100,000 Residents

Rash Syndrome

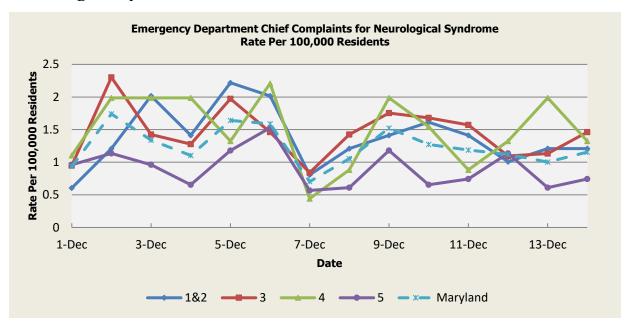


There was one Rash Syndrome outbreak reported this week, one (1) outbreak of Scabies in a Nursing Home.

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.25	1.67	1.76	0.97	1.38	
Median Rate*	1.21	1.61	1.77	0.92	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

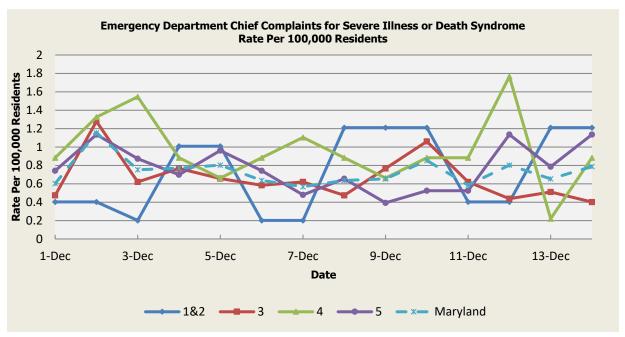


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.79	0.97	0.88	0.62	0.81	
Median Rate*	0.81	0.88	0.88	0.57	0.74	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



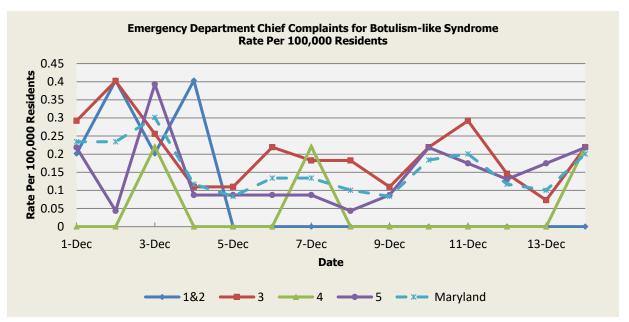
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.66	0.89	0.84	0.52	0.73		
Median Rate*	0.60	0.84	0.66	0.48	0.70		

* Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

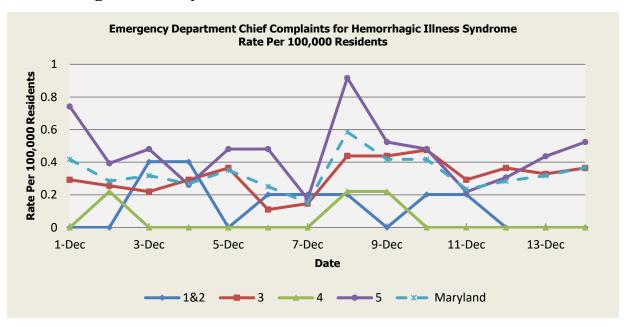


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome, 12/1 (Regions 1&2,3,5), 12/2 (Regions 1&2,3), 12/3 (Regions 1&2,4,5), 12/4 (Region 1&2), 12/7 (Region 4), 12/10 (Region 5), 12/11 (Regions 3,5), 12/13 (Region 5), 12/14 (Regions 4,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.08	0.13	0.06	0.08	0.10	
Median Rate*	0.00	0.11	0.00	0.04	0.08	

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

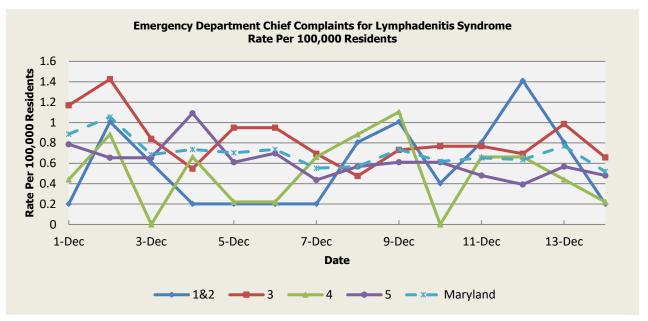


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome,12/1 (Region 5), 12/2 (Regions 4,5), 12/3 (Regions 1&2,5), 12/4 (Regions 1&2,5), 12/5 (Regions 3,5), 12/6 (Regions 1&2,5), 12/7 (Regions 1&2), 12/8 (Regions 1&2,3,4,5), 12/9 (Regions 3,4,5), 12/10 (Regions 1&2,3,5), 12/11 (Regions 1&2,5), 12/12 (Regions 3,5), 12/13 (Regions 3,5), 12/14 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.16	0.04	0.13	0.13		
Median Rate*	0.00	0.11	0.00	0.09	0.08		

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome, 12/1 (Region 5), 12/2 (Regions 1&2,3,4,5), 12/4 (Region 5), 12/8 (Regions 1&2,4), 12/9 (Regions 1&2,4), 12/11 (Region 1&2), 12/12 (Region 1&2), 12/13 (Region 1&2). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.39	0.60	0.41	0.39	0.49		
Median Rate*	0.40	0.51	0.44	0.35	0.44		

^{*} Per 100,000 Residents

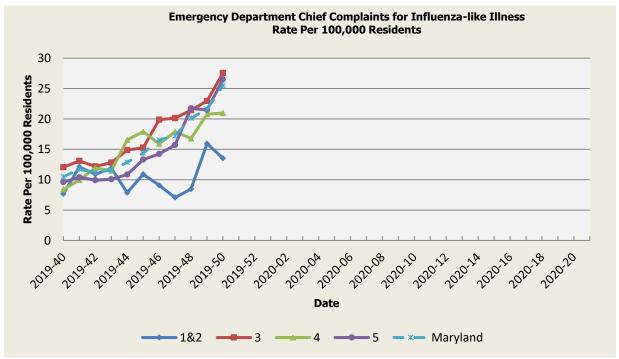
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surfeeds into ESSENCE is currently being validated. We will include once the validation process is complete.	
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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2019 through May 2020). Seasonal Influenza activity for Week 50 was: High Activity and Widespread geographic activity.

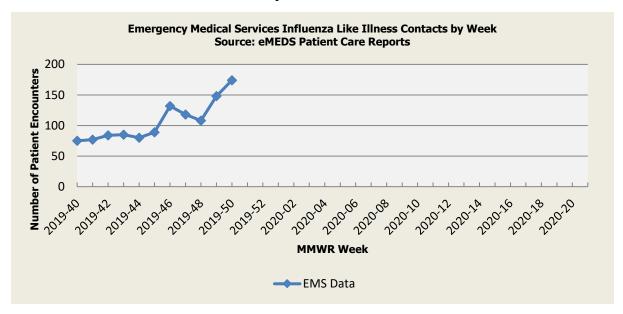
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.14	13.31	12.79	11.28	12.23	
Median Rate*	7.66	10.38	9.50	8.82	9.49	

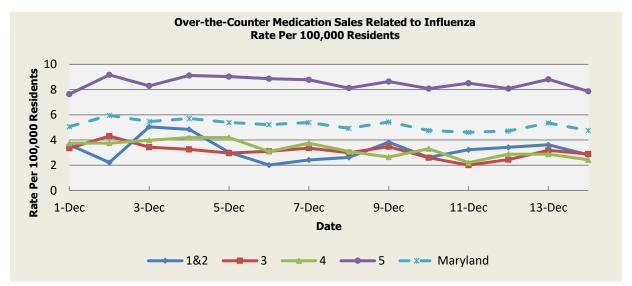
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

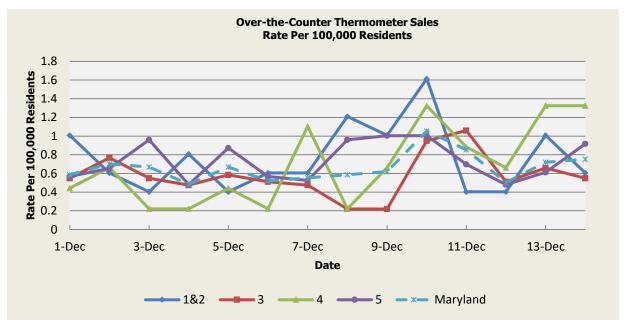


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.44	4.41	2.66	7.76	5.48
Median Rate*	2.82	3.51	2.21	6.99	4.72

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.89	2.75	2.20	3.66	3.07
Median Rate*	2.62	2.67	1.99	3.62	3.03

^{*} Per 100,000 Residents

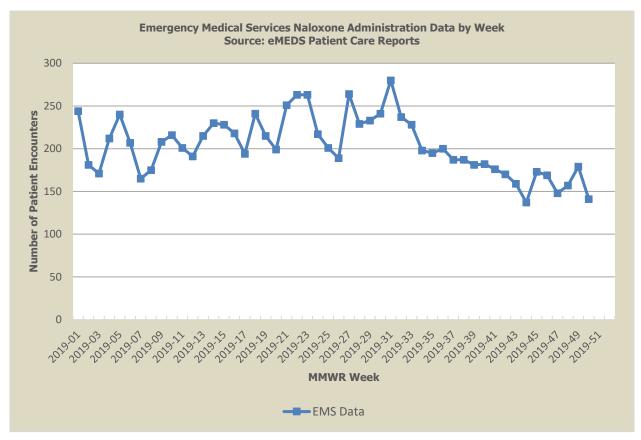
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

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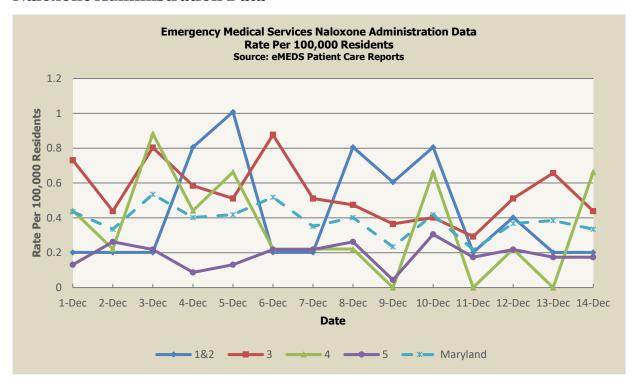
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 19th, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

E COLI EHEC (NATIONAL), 20 Dec 2019, Since the previous update on 4 Dec 2019, an additional 36 ill people have been reported. As of 17 Dec 2019, a total of 138 people infected with the outbreak strain of _E. coli_ O157:H7 have been reported from 25 states. Read More: https://promedmail.org/promed-post/?id=6850941

EASTERN EQUINE ENCEPHALITIS (NATIONAL), 20 Dec 2019, As of 17 Dec 2019, CDC has received reports of 38 confirmed [human] cases of eastern equine encephalitis virus disease for this year, including 15 deaths. Cases have been reported from the following 10 states. Read More: https://promedmail.org/promed-post/?id=6850287

LEGIONELLOSIS (**ILLINOIS**), 19 Dec 2019, Illinois state and local health officials report investigating 3 cases of Legionnaires' disease in individuals who were patients at Northwestern Medicine Central DuPage Hospital. Read More: https://promedmail.org/promed-post/?id=6849543

CAMPYLOBACTERIOSIS (**MULTISTATE**), 18 Dec 2019, CDC and public health officials in several states are investigating a multistate outbreak of multidrug-resistant human _Campylobacter jejuni_ infections linked to contact with puppies from pet stores. Read More: https://promedmail.org/promed-post/?id=6847483

INTERNATIONAL DISEASE REPORTS

MERS-COV (**75**) (**SAUDI ARABIA**), 19 Dec 2019, From [1-30 Nov 2019], the National IHR Focal Point of Saudi Arabia reported 10 additional cases of Middle East respiratory syndrome (MERS-CoV) infection and one associated death. Read More: https://promedmail.org/promed-post/?id=6849879

LEGIONELLOSIS (**FRANCE**), 19 Dec 2019, The prefecture of Bas-Rhin reports that 22 cases of legionellosis have been diagnosed since 1 Nov 2019 in patients aged 42-88 years living in the west of the agglomeration of Strasbourg (Strasbourg Ouest, Lingolsheim, Ostwald). Read More: https://promedmail.org/promed-post/?id=6849436

POLIOMYELITIS UPDATE (GHANA), 18 Dec 2019, There has been a surge in the number of polio cases across the country [Ghana] since July this year [2019], and this has been an issue of concern for both the Government and other health partners. Read More: https://promedmail.org/promed-post/?id=6845754

CIGUATERA FISH POISONING (CANARY ISLANDS), 18 Dec 2019, Health officials with the Government of the Canary Islands have reported a possible outbreak of ciguatera after finding 6 cases of food poisoning [that occurred] after consuming black medregal (amberjack) in La Victoria de Acentejo, according to an El Dia report (computer translated). Read More: https://promedmail.org/promed-post/?id=6847607

LEISHMANIASIS (**KENYA**), 18 Dec 2019, Health officials continue to report cases of the parasitic disease, leishmaniasis, in Kenya. During the week ending [8 Dec 2019], officials saw 34 additional cases. Read More: https://promedmail.org/promed-post/?id=6846557

BOLIVIAN HEMORRHAGIC FEVER (BOLIVIA), 18 Dec 2019, The President of the La Paz Medical Association, Luis Larrea, today [16 Dec 2019] reported a suspicious case of hemorrhagic fever coming from the Yungas area in La Paz department; the patient is being treated in the Agarmont Hospital. Read More: https://promedmail.org/promed-post/?id=6846075

YELLOW FEVER (NIGERIA), 17 Dec 2019, Nigeria is responding to successive yellow fever outbreaks, with nearly a 3-fold increase in number of confirmed cases in 2019 compared to 2018,

suggesting intensification of yellow fever virus transmission. Read More: https://promedmail.org/promed-post/?id=6845662

CRYPTOSPORIDIOSIS (**SWEDEN**), 15 Dec 2019, While cases are declining, the number of cases reported per week remains slightly higher compared to the same period in previous years. Read More: https://promedmail.org/promed-post/?id=6841370

MONKEYPOX (**NIGERIA**), 15 Dec 2019, Nigeria continues to report sporadic cases of monkeypox since September 2017. Read More: https://promedmail.org/promed-post/?id=6841084

LASSA FEVER (**NIGERIA**), 15 Dec 2019, In the reporting week 48 (25 Nov - 1 Dec 2019), 8 new confirmed** cases were reported from Ondo (6) and Edo (2) states, with 2 new deaths from Ondo state; Read More: https://promedmail.org/promed-post/?id=6841026

MUMPS UPDATE (**EUROPE**), 14 Dec 2019, Hundreds of students have been struck down by a severe outbreak of mumps that is spreading across British universities. Read More: https://promedmail.org/promed-post/?id=6841027

FOODBORNE ILLNESS (KENYA), 14 Dec 2019, Two people died while 6 are in critical condition following suspected food poisoning in Elmaine village, Ilchamus, in Baringo South on Friday evening [13 Dec 2019]. Read More: https://promedmail.org/promed-post/?id=6841083

AFRICAN SWINE FEVER (INDONESIA), 13 Dec 2019, The Minister of Agriculture announced the confirmation of African swine fever (ASF) outbreak in North Sumatra Province on 12 Dec 2019. Since late September [2019], increased pig mortality [has] been reported in North Sumatra and some other provinces. Read More: https://promedmail.org/promed-post/?id=6839167

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

<u>NOTE</u>: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

